

Full Report (All Nutrients) 09226, Papayas, raw ^c

Report Date: May 18, 2015 01:13 EDT

Nutrient values and weights are for edible portion.

Food Group : Fruits and Fruit Juices

Carbohydrate Factor: 3.6 Fat Factor: 8.37 Protein Factor: 3.36 Nitrogen to Protein Conversion Factor: 6.25

Refuse:38% Refuse Description: Seeds and skin

| Nutrient | Unit | 1 Value Per100 g | Data points | Std. Error | 1 cup 1" pieces 145g | 1 cup, mashed 230g | 1 fruit, small 157g | 1 fruit, large 781g |
|------------------------------------------|------|------------------------|-------------|------------|-------------------------|-----------------------|------------------------|------------------------|
| Proximates | | | | | | | | |
| Water ^{1 2 3 9 11 13} | g | 88.06 | 72 | 1.096 | 127.69 | 202.54 | 138.25 | 687.75 |
| Energy | kcal | 43 | -- | -- | 62 | 99 | 68 | 336 |
| Energy | kJ | 179 | -- | -- | 260 | 412 | 281 | 1398 |
| Protein ^{2 3} | g | 0.47 | 9 | 0.094 | 0.68 | 1.08 | 0.74 | 3.67 |
| Total lipid (fat) ^{2 3} | g | 0.26 | 9 | 0.145 | 0.38 | 0.60 | 0.41 | 2.03 |
| Ash ^{2 3} | g | 0.39 | 9 | 0.087 | 0.57 | 0.90 | 0.61 | 3.05 |
| Carbohydrate, by difference | g | 10.82 | -- | -- | 15.69 | 24.89 | 16.99 | 84.50 |
| Fiber, total dietary ^{2 3 9 11} | g | 1.7 | 9 | 0.184 | 2.5 | 3.9 | 2.7 | 13.3 |
| Sugars, total ² | g | 7.82 | 3 | 1.405 | 11.34 | 17.99 | 12.28 | 61.07 |
| Sucrose ² | g | 0.00 | 3 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 |
| Glucose (dextrose) ² | g | 4.09 | 3 | 0.684 | 5.93 | 9.41 | 6.42 | 31.94 |
| Fructose ² | g | 3.73 | 3 | 0.722 | 5.41 | 8.58 | 5.86 | 29.13 |
| Lactose ² | g | 0.00 | 3 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maltose ² | g | 0.00 | 3 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 |
| Galactose ² | g | 0.00 | 3 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 |
| Starch ² | g | 0.00 | 1 | -- | 0.00 | 0.00 | 0.00 | 0.00 |
| Minerals | | | | | | | | |
| Calcium, Ca ^{1 2 3 4} | mg | 20 | 70 | 2.114 | 29 | 46 | 31 | 156 |
| Iron, Fe ^{1 2 3 4} | mg | 0.25 | 70 | 0.062 | 0.36 | 0.58 | 0.39 | 1.95 |
| Magnesium, Mg ^{1 2 3 4} | mg | 21 | 70 | 1.665 | 30 | 48 | 33 | 164 |

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| Phosphorus, P 1 2 3 | mg | 10 | 69 | 2.206 | 14 | 23 | 16 | 78 |
| Potassium, K 1 2 3 4 | mg | 182 | 70 | 11.140 | 264 | 419 | 286 | 1421 |
| Sodium, Na 1 2 3 4 | mg | 8 | 70 | 2.031 | 12 | 18 | 13 | 62 |
| Zinc, Zn 1 2 3 4 | mg | 0.08 | 70 | 0.008 | 0.12 | 0.18 | 0.13 | 0.62 |
| Copper, Cu 1 2 3 4 | mg | 0.045 | 70 | 0.012 | 0.065 | 0.104 | 0.071 | 0.351 |
| Manganese, Mn 1 2 3 4 | mg | 0.040 | 70 | 0.016 | 0.058 | 0.092 | 0.063 | 0.312 |
| Selenium, Se | µg | 0.6 | -- | -- | 0.9 | 1.4 | 0.9 | 4.7 |
| Vitamins | | | | | | | | |
| Vitamin C, total ascorbic acid 1 2 3 10 | mg | 60.9 | 73 | 3.838 | 88.3 | 140.1 | 95.6 | 475.6 |
| Thiamin 2 3 | mg | 0.023 | 9 | 0.006 | 0.033 | 0.053 | 0.036 | 0.180 |
| Riboflavin 2 3 | mg | 0.027 | 9 | 0.005 | 0.039 | 0.062 | 0.042 | 0.211 |
| Niacin 2 3 | mg | 0.357 | 9 | 0.027 | 0.518 | 0.821 | 0.560 | 2.788 |
| Pantothenic acid 2 3 | mg | 0.191 | 9 | 0.052 | 0.277 | 0.439 | 0.300 | 1.492 |
| Vitamin B-6 2 3 | mg | 0.038 | 9 | 0.012 | 0.055 | 0.087 | 0.060 | 0.297 |
| Folate, total a 2 3 | µg | 37 | 8 | 1.515 | 54 | 85 | 58 | 289 |
| Folic acid | µg | 0 | -- | -- | 0 | 0 | 0 | 0 |
| Folate, food | µg | 37 | 8 | 1.515 | 54 | 85 | 58 | 289 |
| Folate, DFE | µg | 37 | -- | -- | 54 | 85 | 58 | 289 |
| Choline, total | mg | 6.1 | -- | -- | 8.8 | 14.0 | 9.6 | 47.6 |
| Vitamin B-12 | µg | 0.00 | -- | -- | 0.00 | 0.00 | 0.00 | 0.00 |
| Vitamin B-12, added | µg | 0.00 | -- | -- | 0.00 | 0.00 | 0.00 | 0.00 |
| Vitamin A, RAE 1 2 3 5 7 8 | µg | 47 | -- | -- | 68 | 108 | 74 | 367 |
| Retinol | µg | 0 | -- | -- | 0 | 0 | 0 | 0 |
| Carotene, beta 1 2 3 5 7 8 13 | µg | 274 | 76 | 122.108 | 397 | 630 | 430 | 2140 |
| Carotene, alpha 1 2 5 13 | µg | 2 | 67 | 2.276 | 3 | 5 | 3 | 16 |
| Cryptoxanthin, beta 1 2 3 5 7 8 | µg | 589 | 75 | 160.896 | 854 | 1355 | 925 | 4600 |
| Vitamin A, IU 1 2 3 5 7 8 | IU | 950 | -- | -- | 1378 | 2185 | 1492 | 7420 |
| Lycopene b 1 2 13 | µg | 1828 | 22 | 206.714 | 2651 | 4204 | 2870 | 14277 |
| Lutein + zeaxanthin 1 2 5 12 | µg | 89 | 67 | 31.655 | 129 | 205 | 140 | 695 |
| Vitamin E (alpha-tocopherol) 2 6 | mg | 0.30 | 5 | 0.097 | 0.44 | 0.69 | 0.47 | 2.34 |
| Vitamin E, added | mg | 0.00 | -- | -- | 0.00 | 0.00 | 0.00 | 0.00 |
| Tocopherol, beta 2 6 | mg | 0.02 | 5 | 0.013 | 0.03 | 0.05 | 0.03 | 0.16 |

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| Tocopherol, gamma ^{2,6} | mg | 0.09 | 5 | 0.009 | 0.13 | 0.21 | 0.14 | 0.70 |
| Tocopherol, delta ^{2,6} | mg | 0.01 | 5 | 0.013 | 0.01 | 0.02 | 0.02 | 0.08 |
| Vitamin D (D2 + D3) | µg | 0.0 | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 |
| Vitamin D | IU | 0 | -- | -- | 0 | 0 | 0 | 0 |
| Vitamin K (phylloquinone) | µg | 2.6 | -- | -- | 3.8 | 6.0 | 4.1 | 20.3 |
| Lipids | | | | | | | | |
| Fatty acids, total saturated | g | 0.081 | -- | -- | 0.117 | 0.186 | 0.127 | 0.633 |
| 4:0 | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 6:0 | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 8:0 | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 10:0 | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 12:0 | g | 0.002 | 2 | -- | 0.003 | 0.005 | 0.003 | 0.016 |
| 14:0 | g | 0.013 | 3 | -- | 0.019 | 0.030 | 0.020 | 0.102 |
| 16:0 | g | 0.060 | 3 | -- | 0.087 | 0.138 | 0.094 | 0.469 |
| 18:0 | g | 0.004 | 3 | -- | 0.006 | 0.009 | 0.006 | 0.031 |
| Fatty acids, total monounsaturated | g | 0.072 | -- | -- | 0.104 | 0.166 | 0.113 | 0.562 |
| 16:1 undifferentiated | g | 0.038 | 3 | -- | 0.055 | 0.087 | 0.060 | 0.297 |
| 18:1 undifferentiated | g | 0.034 | 3 | -- | 0.049 | 0.078 | 0.053 | 0.266 |
| 20:1 | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 22:1 undifferentiated | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| Fatty acids, total polyunsaturated | g | 0.058 | -- | -- | 0.084 | 0.133 | 0.091 | 0.453 |
| 18:2 undifferentiated | g | 0.011 | 3 | -- | 0.016 | 0.025 | 0.017 | 0.086 |
| 18:3 undifferentiated | g | 0.047 | 3 | -- | 0.068 | 0.108 | 0.074 | 0.367 |
| 18:4 | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 20:4 undifferentiated | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 20:5 n-3 (EPA) | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 22:5 n-3 (DPA) | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| 22:6 n-3 (DHA) | g | 0.000 | -- | -- | 0.000 | 0.000 | 0.000 | 0.000 |
| Cholesterol | mg | 0 | -- | -- | 0 | 0 | 0 | 0 |
| Amino Acids | | | | | | | | |
| Tryptophan | g | 0.008 | 6 | -- | 0.012 | 0.018 | 0.013 | 0.062 |
| Threonine | g | 0.011 | 1 | -- | 0.016 | 0.025 | 0.017 | 0.086 |
| Isoleucine | g | 0.008 | 1 | -- | 0.012 | 0.018 | 0.013 | 0.062 |

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| Leucine | g | 0.016 | 1 | -- | 0.023 | 0.037 | 0.025 | 0.125 |
| Lysine | g | 0.025 | 7 | -- | 0.036 | 0.058 | 0.039 | 0.195 |
| Methionine | g | 0.002 | 5 | -- | 0.003 | 0.005 | 0.003 | 0.016 |
| Phenylalanine | g | 0.009 | 1 | -- | 0.013 | 0.021 | 0.014 | 0.070 |
| Tyrosine | g | 0.005 | 1 | -- | 0.007 | 0.012 | 0.008 | 0.039 |
| Valine | g | 0.010 | 1 | -- | 0.014 | 0.023 | 0.016 | 0.078 |
| Arginine | g | 0.010 | 1 | -- | 0.014 | 0.023 | 0.016 | 0.078 |
| Histidine | g | 0.005 | 1 | -- | 0.007 | 0.012 | 0.008 | 0.039 |
| Alanine | g | 0.014 | 1 | -- | 0.020 | 0.032 | 0.022 | 0.109 |
| Aspartic acid | g | 0.049 | 1 | -- | 0.071 | 0.113 | 0.077 | 0.383 |
| Glutamic acid | g | 0.033 | 1 | -- | 0.048 | 0.076 | 0.052 | 0.258 |
| Glycine | g | 0.018 | 1 | -- | 0.026 | 0.041 | 0.028 | 0.141 |
| Proline | g | 0.010 | 1 | -- | 0.014 | 0.023 | 0.016 | 0.078 |
| Serine | g | 0.015 | 1 | -- | 0.022 | 0.034 | 0.024 | 0.117 |
| Other | | | | | | | | |
| Alcohol, ethyl | g | 0.0 | -- | -- | 0.0 | 0.0 | 0.0 | 0.0 |
| Caffeine | mg | 0 | -- | -- | 0 | 0 | 0 | 0 |
| Theobromine | mg | 0 | -- | -- | 0 | 0 | 0 | 0 |
| Flavonoids | | | | | | | | |
| Flavones | | | | | | | | |
| Apigenin ^{14 17} | mg | 0.0 | 4 | 0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Luteolin ^{14 17} | mg | 0.0 | 4 | 0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Flavonols | | | | | | | | |
| Kaempferol ^{14 15 17} | mg | 0.0 | 5 | 0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Myricetin ^{14 15 17} | mg | 0.0 | 5 | 0.01 | 0.0 | 0.0 | 0.0 | 0.2 |
| Quercetin ^{14 15 17} | mg | 0.0 | 5 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Isoflavones | | | | | | | | |
| Daidzein ¹⁶ | mg | 0.0 | 1 | -- | 0.0 | 0.0 | 0.0 | 0.0 |
| Genistein ¹⁶ | mg | 0.0 | 1 | -- | 0.0 | 0.0 | 0.0 | 0.0 |
| Total isoflavones ¹⁶ | mg | 0.0 | 1 | -- | 0.0 | 0.0 | 0.0 | 0.0 |

Sources of Data¹M.M. Wall Ascorbic acid, vitamin A, & mineral composition of banana & papaya cultivars grown in Hawaii, 2006 Journal of Food Composition and Analysis 19 pp.434-445²Nutrient Data Laboratory, ARS, USDA National Food and Nutrient Anlaysis Program Wave 12i, 2008 Beltsville MD³Produce Marketing Association (PMA) Nutrient Content of Papaya, 1984⁴N.J. Miller-Ihli Atomic absorption and atomic emission spectrometry for the determination of the trace element content of selected fruits consumed in the United States, 1996 Journal of Food Composition and Analysis 9 4 pp.301-311

⁵National Institutes of Health (NIH) Carotenoid analyses of U.S. foods, Food Composition Laboratory, 1997⁶A.A. Franke, Suzanne Murphy, R. Lacey, L.J. Custer Tocopherol and tocotrienol levels of foods consumed in Hawaii, 2007 Journal of Agricultural and Food Chemistry 55 pp.769-778⁷T Philip, T S Chen Quantitative analyses of major carotenoid fatty acid esters in fruits by liquid chromatography: Persimmon and Papaya., 1988 J. Food Science 53 6 pp.1720-1722⁸T Philip, T S Chen Development of a method for the quantitative estimation of provitamin A carotenoids in some fruits., 1988 J. Food Science 53 pp.1703-1707⁹K. Mahattanatawee, J.A. Manthey, G. Luzio, S. T. Talcott, K. Goodner et al Total antioxidant activity and fiber content of select Florida-grown tropical fruits, 2006 Journal of Agricultural and Food Chemistry 54 pp.7355-7363¹⁰A.A. Franke, L.J. Custer, Christi Arakaki, Suzanne Murphy Vitamin c and flavonoid levels of fruits and vegetables consumed in Hawaii., 2004 Journal of Food Composition and Analysis 17 pp.1-35¹¹N Vollendorf, J Marlatt Comparison of Two Methods of Fiber Analysis of 58 Foods, 1993 Journal of Food Composition and Analysis 6 pp.203-214¹²J.M. Humphries, F Khachik Distribution of lutein, zeaxanthin, & related geometrical isomers in fruit, vegetables, wheat, & pasta products, 2003 Journal of Agricultural and Food Chemistry 51 pp.1322-1327¹³J. Lako, V.C. Trenergy, M. Wahlqvist, N. Wattanapenpaiboon, S. Sotheeswaran, R. Premier Phytochemical flavonols, carotenoids and the antioxidant properties of a wide selection of Fijian fruit, vegetables and other readily available foods, 2007 Food Chemistry 101 pp.1727-1741¹⁴Franke, A.A., Custer, L.J., Arakaki, C., and Murphy, S.P. Vitamin C and flavonoid levels of fruits and vegetables consumed in Hawaii., 2004 J. Food Comp. Anal. 17 pp.1-35¹⁵Lako, J., Trenergy, V. C., Wahlqvist, M., Wattanapenpaiboon, N., Sotheeswaran, S., Premier, R. Phytochemical flavonols, carotenoids and the antioxidant properties of a wide selection of Fijian fruit, vegetables and other readily available foods., 2007 Food Chemistry 101 pp.1727-1741¹⁶Horn-Ross, P. L., Barnes, S., Lee, M., Coward, L., Mandel, E., Koo, J., John, E. M., and Smith, M. Assesing phytoestrogen exposure in epidemiologic studies: development of a database (United States)., 2000 Cancer Causes and Control 11 pp.289-298¹⁷Andres-Laceuva, C., Monagas, M., Khan, N., Izquierdo-Pulido, M., Urpi-Sarda, M., Permanyer, J., and Lamuela-Raventos, R. M. Flavanol and flavonol contents of cocoa powder products: Influence of the manufacturing process., 2008 J. Agric. Food Chem. 56 pp.3111-3117**Footnotes**^a Mean value contains data based on the analysis of 5-methyltetrahydrofolate plus total folate determined microbiologically^b Based on red-fleshed papaya; yellow-orange-fleshed papayas have 0 mcg lycopene/100 g.^c Large variability in weight of whole fruit, especially between different cultivars.**Langual Code(s)**

- A0143 FRUIT OR FRUIT PRODUCT (US CFR)
- A1279 0900 FRUITS AND FRUIT JUICES (USDA SR)
- B1249 PAPAYA
- C0229 FRUIT, PEEL REMOVED, CORE, PIT OR SEED REMOVED
- E0150 WHOLE, NATURAL SHAPE
- F0003 NOT HEAT-TREATED
- G0003 COOKING METHOD NOT APPLICABLE
- H0003 NO TREATMENT APPLIED
- J0001 PRESERVATION METHOD NOT KNOWN
- K0003 NO PACKING MEDIUM USED
- M0001 CONTAINER OR WRAPPING NOT KNOWN
- N0001 FOOD CONTACT SURFACE NOT KNOWN
- P0024 HUMAN FOOD, NO AGE SPECIFICATION